

CLAIMS

1) A form-and-seal unit for producing aseptic sealed packages of a pourable food product from a tube
5 (2) of packaging material filled with said food product and fed along a vertical path (A), said unit (1) comprising a fixed structure (3); and forming means (5, 5') which interact cyclically with said tube (2) of packaging material, and in turn comprise at least two
10 pairs of jaws (7) having sealing means (13, 14) and movable between an open position and a closed position in which said sealing means (13, 14) cooperate with said tube (2) of packaging material, and respective pairs of forming flaps (21) carried by respective said jaws (7)
15 and having respective half-shell forming portions (22), said forming flaps (21) being movable between a withdrawn position, in which they do not cooperate with said tube (2), and a forward position, in which said respective half-shell forming portions (22) surround
20 said tube, in said closed position of the relative jaws (7), to form a cavity of predetermined volume; said unit comprising fixed cam means (25); and cam-follower means (30) carried by said forming flaps (21) and cooperating with said fixed cam means (25) to control the movement
25 of said forming flaps (21) from said withdrawn position to said forward position; said unit (1) being characterized in that said forming flaps (21) are

selectable from a number of types of forming flaps (21a, 21b) differing in size and for producing respective types of packages; and in that said fixed cam means (25) define different work profiles (37, 38) selectively engageable by said cam-follower means (30), depending on the type of forming flaps (21a, 21b) used.

2) A unit as claimed in Claim 1, characterized in that said fixed cam means comprise two cam control assemblies (25) located on opposite sides of said forming means (5, 5'); said cam-follower means being defined, for each forming flap (21), by two cam-follower rollers (30) extending laterally from the respective said forming flap (21) and cooperating with respective said cam control assemblies (25).

3) A unit as claimed in Claim 2, characterized in that said cam control assemblies (25) each comprise a top cam (35) for controlling the approach movement of said forming flaps (21) towards said tube (2) of packaging material, and two bottom cams (36) for controlling the closing movement of said forming flaps (21) about said tube (2) of packaging material.

4) A unit as claimed in Claim 3, characterized in that said different work profiles (37, 38) of said cam control means (25) are defined by said top cams (35).

5) A unit as claimed in Claim 4, characterized in that said top cams (35) are defined by flat plates; said different work profiles (37, 38) being defined by

lateral edge portions (39) of said top cams (35) offset in the direction of the thickness of the top cams (35).

6) A unit as claimed in Claim 5, characterized in that said cam-follower rollers (30) of the different
5 types of forming flaps (21a, 21b) are different distances (D, d) apart, so as to cooperate with respective work profiles (37, 38) of said top cams (35).

7) A unit as claimed in one of Claims 3 to 6, characterized in that said bottom cams (36) have common
10 work profiles for different types of forming flaps (21a, 21b).